



City of Cayce

## Are You Hungry For Change?

Is There An Appetite Within The Cayce Department of Public Safety To Support A Wellness Program?

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## **Introduction**

It is generally accepted that firefighting and policing are physically and mentally demanding careers. Yes, officers in both professions often times experience prolonged periods of performing mundane and low energy tasks, such as writing reports, patrolling the city or checking equipment on trucks. These mundane tasks may even consume most of our shifts. However, on occasion, and at a moment's notice, everything can change for the officer. Officers are expected to be ready to spring into action and perform critical, life-saving, and dangerous tasks at peak performance. That peak performance may be for one minute, five minutes, 30 minutes, or even an hour or more. The public and colleagues expect officers to be prepared. So, are we?

Unfortunately, that may not be the case. Research has shown, for example, the average law enforcement officer will be physically depleted in less than sixty seconds of full out exertion (Force Science). So why, with such an emphasis on performance, are law enforcement and firefighting not among the most fit and healthiest professions?

A major issue is that, according to a Wall Street Journal analysis of data from an American Journal of Preventive Medicine, police officers and firefighters have the highest rate of obesity (41%) of any profession in the United States. The study defined obese as having a body mass index (BMI) of 30 or above. A healthy BMI is between 18.5 and 25. Among possible causes are stress, shift work affecting sleep patterns, poor eating habits, and long periods of inactivity (PoliceOne.com).

But the problems don't stop there. Heart attacks and strokes (often associated with obesity) are other health issues firefighters and police officers have to contend with. For example, the average age of a police officer suffering a cardiac arrest is 49 years (Officer.com). That is almost 20 years younger than the national average. Seventy-seven percent of sudden cardiac arrest deaths of police officers occur during non-routine activities such as restraining a suspect or an altercation, pursuits, or medical rescue operations. In the three years 2015-2017, roughly 12% of all police line of duty deaths were the result of cardiac arrest. Of those, half were 41 years of age or older (National Law Enforcement Officer Memorial Fund).

For firefighters the rate of death caused by heart attack or stroke during the same period was significantly higher. Between 2015 and 2017 cardiac arrest or stroke accounted for 66%, 52%, and 64%, respectively, of all line of duty deaths. The activities the firefighters were engaged in included being on scene of an emergency, returning from a call, or within 24 hours of activity. Of those deaths over 80% were at least 41 years of age (FEMA Annual Report).

Another health issue the professions share is stress. A 2018 report by Career Cast placed firefighting (#2) and policing (#4) in the top five most stressful jobs. The report considered several factors including physical demands, risk of death or grievous injury, public scrutiny, and environmental conditions.

A career in one or the other field would be challenging enough for most. If one can conceive of the stress and physical demands of being either a firefighter or police officer, imagine having to be responsible and competent to perform both. The Cayce Department of Public Safety employs individuals that are certified in both firefighting and law enforcement.

That is what half the officers in the department face. The department has 86 employees. Forty-nine are dual certified, nineteen are police certified and nine are full-time firefighters.

It has been the history of the department not to emphasize physical fitness or well-being of its officers. New recruits are required to perform a physical agility test similar to the one mandated at the South Carolina Criminal Justice Academy. However, once on board there are no further physical requirements. There is no policy regarding an officer's physical preparedness to complete required tasks. Annual block training does not cover nutrition, physical fitness or well-being. The culture has been, like many departments, leave it up to the individual officer to maintain their fitness. With a new administration in place and the department seeking accreditation, perhaps now, is the opportunity to change this culture.

### **Research Objective**

The objective of this research is to learn if there is an interest to create and implement a wellness program in the department that has employee buy-in and provides incentives for employees to participate. To help accomplish this goal employees were asked to answer a survey to help determine (a) if employees have fitness goals, (b) how employees feel about being held accountable for their fitness, and (c) how employees can be motivated to get conditioned. By analyzing their answers it may be determined if there is a basis for the development of a successful wellness program at the Cayce Department of Public Safety.

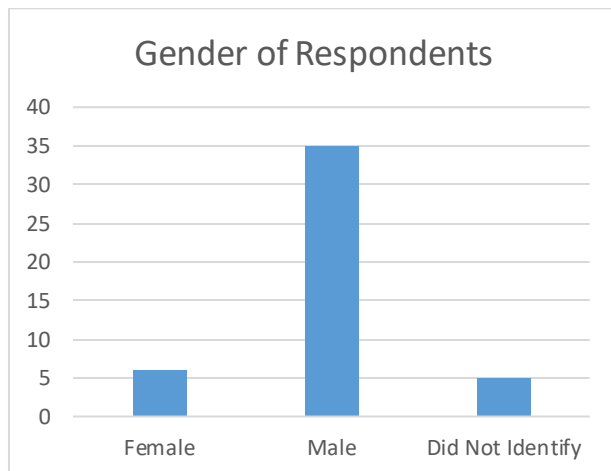
## Data Collection

The goal of the survey is to determine if there is the potential for enough employee buy-in to develop a successful wellness program. The data reviewed consists of blind surveys sent out to all 86 employees of the Cayce Department of Public Safety. Employees consist of dual certified officers, firefighters, police officers, and administrative staff. Forty-six responses were received (53% response rate). Questions that asked for options beyond yes and no were not limited in the number of answers a respondent could provide. Two questions asked for the respondents' opinions. The questionnaire consisted of the following questions:

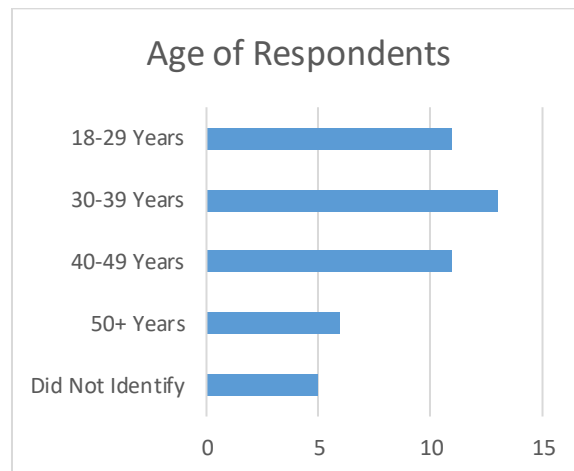
1. Do you currently have any health or fitness goals?
  - a. No
  - b. Yes
    - i. Improve diet
    - ii. Improve strength
    - iii. Increase aerobic capacity
    - iv. Exercise more in general
    - v. Other
2. Do you currently exercise on a regular basis?
  - a. No
  - b. Yes
    - i. At least 150 minutes of moderate aerobic activity a week
    - ii. At least 75 minutes of vigorous aerobic activity a week
    - iii. Strength training of all major muscle groups at least twice a week
    - iv. Some combination of above
    - v. Other
3. Would you like to see the department implement a physical fitness standard?
  - a. No
  - b. Yes
4. Do you believe the department should have physical fitness standards that **MUST** be met by all certified (police / fire) officers?
  - a. No
  - b. Yes
5. If you believe the department should have physical fitness standards that must be met, why?
6. If you do not believe the department should have physical fitness standards that must be met, why?

7. If the department implemented a physical fitness program based on incentives would you participate?
  - a. No
  - b. Yes
8. If you would like to see an incentive based physical fitness program what kind of incentives would you like to see?
  - a. Recognition
  - b. Coupon for day(s) off
  - c. Prizes from outside the department
  - d. Other
9. If given the choice would you prefer to
  - a. Be given time to work out while on duty
  - b. Work out when off duty
10. What is your gender?
  - a. Female
  - b. Male
11. What is your age?
  - a. 18-29 years
  - b. 30-39 years
  - c. 40-49 years
  - d. 50 years or older

The gender and age make-up of the respondents is indicated in the graphs below.



Graph 1



Graph 2

## Data Analysis

The first two questions on the survey asked about the respondent's current health goals and exercise regime. Five respondents currently have no health or fitness goals. Forty-one respondents do have health or fitness goals (Graph 3). Their goals are set out in Graph 4.

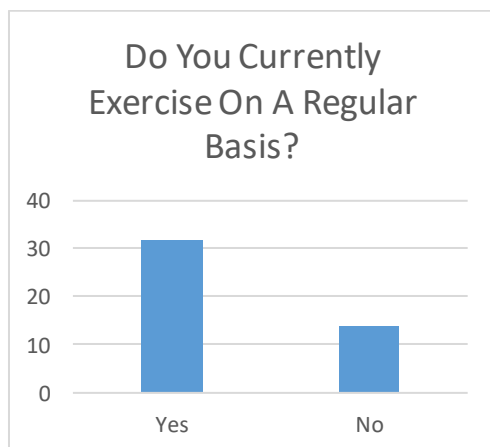


Graph 3

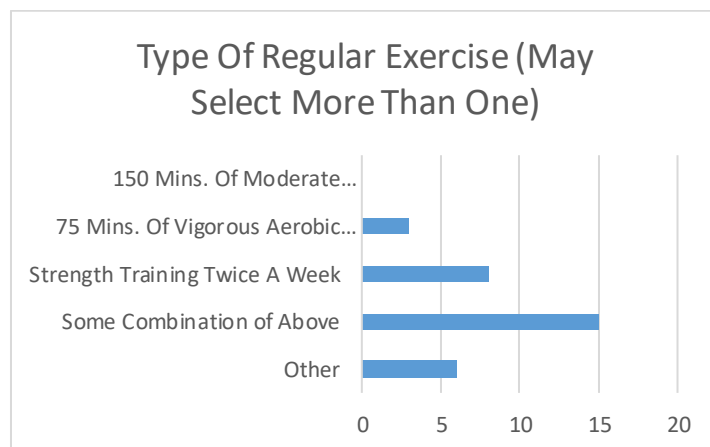


Graph 4

Fourteen respondents stated they currently do not exercise on a regular basis. Thirty-two respondents stated they do exercise regularly (Graph 5). The type and amount of exercise performed is broken down in Graph 6.



Graph 5

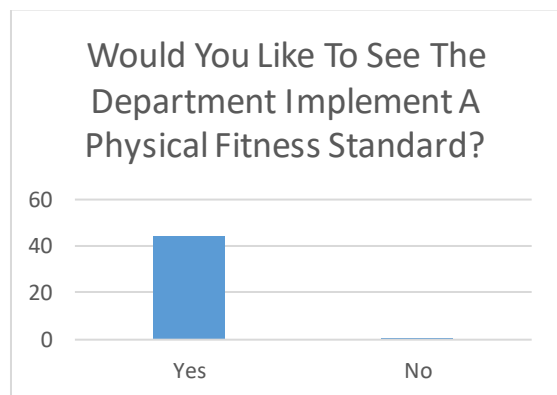


Graph 6

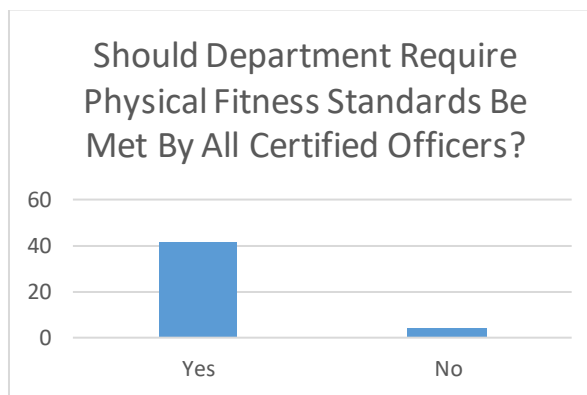
The data shows 89% percent of respondents currently have set for themselves health and fitness goals. Furthermore, 70% of the respondents currently exercise in some form or fashion. The data is consistent with the idea that the employees have a desire to be healthy and fit. That is the first step in achieving a culture of well-being in the department.

The next four questions focus on whether employees believe they should be held to a set of standards to maintain their physical fitness. Forty-four respondents stated they believe the department should implement a physical fitness standard. One respondent stated there should be no fitness standard and one responded both “yes” and “no” (Graph 7).

Forty-two respondents felt all certified police and fire personnel must meet a physical fitness standard set out by the department. Only four disagreed with that assessment (Graph 8).



Graph 7



Graph 8

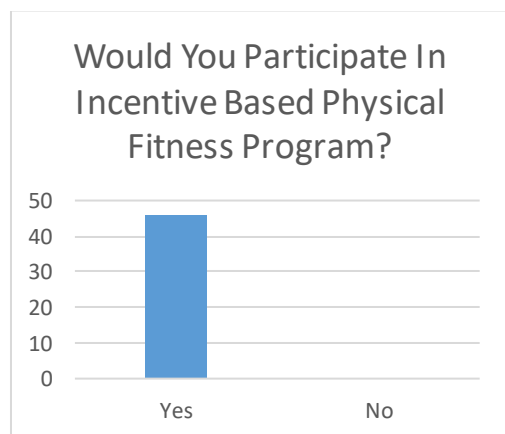
The next two questions asked respondents for their reasons why they or why they did not believe the department should have a mandatory physical fitness standard (see appendix 1 for responses). The most common reasons given for requiring a standard included making sure personnel could adequately perform their required tasks and for officer safety. Other response included reducing the risk of injury, reduce insurance claims, and it helps in dealing with stress.



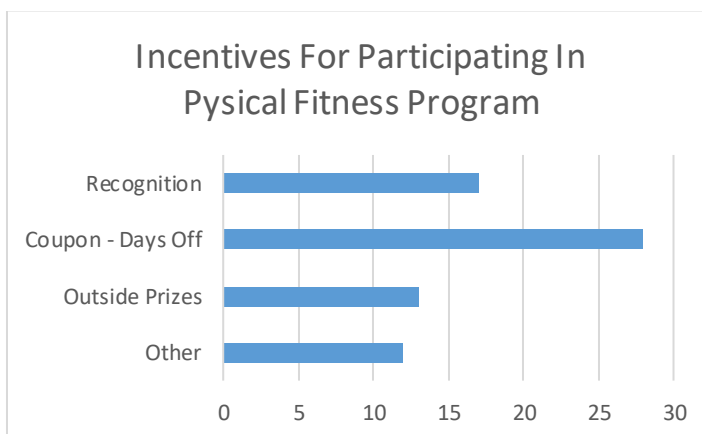
Reasons given for not having a mandatory physical fitness standard included shift work and family obligations make it difficult to find time to work out. Also, one may have a physical limitation that would prevent them from completing a required physical fitness test but not prohibit them from completing their job tasks. Other reasons include not having the time, training or equipment to meet the standard, such standards are not always enforced equitably, and one's employment should not be determined based on a physical fitness test.

The data shows 96% of respondents would like to see the department implement a physical fitness standard, while 91% would like to see some standard become mandatory. Valid concerns on both side of the issue are raised but an overwhelming majority believe the benefits of a physical fitness standard outweigh the disadvantages.

The final three questions deal with how to motivate officers to get into shape and stay in shape. All of the respondents said if the department had an incentive based physical fitness program they would participate (Graph 9). When asked what type of incentives they would like to see, free days off received the most votes. Simple recognition and prizes from outside the department followed. There were twelve responses for other incentives of which four recommended a monetary incentive (Graph 10).

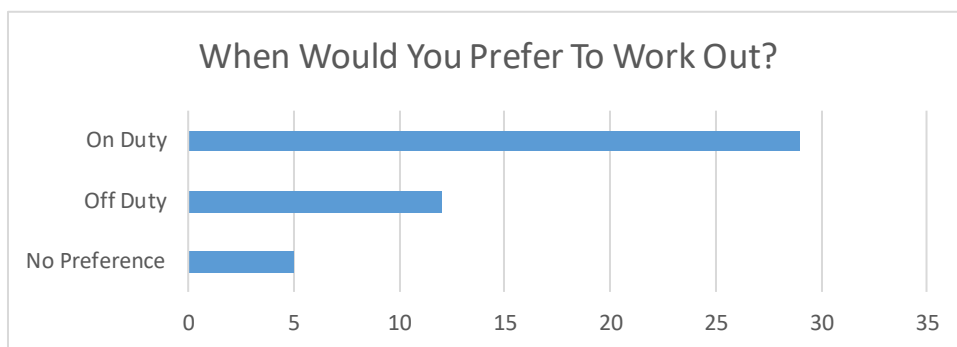


Graph 9



Graph 10

Finally, when given the choice between being given time to work out while on duty or working out off duty twenty-nine respondents would like time to work out on duty, twelve stated they would rather workout off duty and five had no preference (Graph 11).



Graph 11

The data from these questions would indicate officers would be likely to participate in a fitness program if the department offered incentives. No one type of incentive was overwhelmingly favored, however, free days off did receive the highest preference. Finally, the survey shows most officers would like time to work out while on duty. While this would be preferred, there would be some logistical issues to address to make this practical (e.g. manpower, work load, how much time to allow, etc.).

## Recommendations

Prior to being hired all potential recruits must complete an obstacle course fashioned after one utilized by the South Carolina Criminal Justice Academy. The course consists of running, hurdles, stairs, low crawl, jump, clearing fences, climbing through windows, and a dummy drag. Recruits must complete the course under 2 minutes and 15 seconds. The department has free weights, located in the fire house, available to all employees. In addition, all employees have available to them two facilities (Cayce Tennis and Fitness Complex & Planet Fitness), free of

charge, in which to work out. Finally, through the South Carolina State Health Plan employees have available to them an online program (Naturally Slim) designed to help improve their nutritional habits. This program, too, is free of charge.

In order to address the culture of the department surrounding physical fitness and emphasizing the importance of good health the following objectives are recommended:

**Start at the top.** Have the chief address the department. Discuss the image we portray, the dangers/risks our jobs entail and relate it to how /why it is important to maintain good health and physical fitness. Address the old culture and why we want to change it. Set the example by committing the command staff to getting in shape, to go through the same challenges the department as a whole. The chief needs to set out his vision and challenge everyone to achieve those goals.

**Start small, work towards big goals.** We don't want to turn off employees from the start. Employee buy-in and culture change are the goals. Offer different paths for employees to be successful.

- a. Complete the obstacle course. Set the parameters low at the outset and make them more challenging every year.
- b. Lose weight. Have employees set a goal – make it challenging but attainable.
- c. Reduce body mass index. Again, make it challenging but attainable

It may be necessary to have a fitness expert come in and discuss what are challenging, yet, attainable goals.

**Offer incentives.** Offer employees rewards, not only for achieving set goals, but also for participating. Offer greater rewards for attaining higher goals.

**Provide education for the employees.** Make physical fitness and nutrition topics of yearly block training. Bring in professionals to discuss healthy foods, the pros and cons of fast foods and which ones are better to frequent than others. Discuss different workouts and the benefits of each.

**Offer healthy alternatives.** Set aside a small budget that will allow the department to buy fruits and vegetables for personnel to snack on. The snacks could be placed in the firehouse kitchen and be accessible to all and be a healthy alternative to processed foods.

## **Evaluation**

Only personnel that sign up for the challenge would be able to participate. The training division could keep logs of those that participate, when personnel workout, and the goals set and achieved.

No matter the challenge the employee participates in a record of their achievements are maintained. For example, if an employee challenges the obstacle course their completion times are recorded and compared to previous runs to gauge improvement. If an employee chooses the weight loss or BMI challenge those measurements would be recorded and also compared to previous measurements. Every year the data would be reviewed, the results published and the program critiqued.

## **Summary**

Law enforcement and firefighting are very rewarding careers. However, with that sense of reward comes risks. Both careers are physically and emotionally demanding. They entail high risk, dangerous tasks that may only last moments but require great strength and stamina. In

addition, with the responsibilities and scrutiny each career faces officers have to deal with stress. On the flip side, there may be long periods of sedentary activity and boredom.

Both sides of the coin can take a toll on the body and mind. As a result, proper physical health and fitness are paramount to being successful and safe. The problem these fields face is that it is often left to the officers' own will to stay in shape.

The Cayce Department of Public Safety employs police officers, firefighters and administrative support staff. Half the department personnel are certified as both police and firefighters. This paper suggests personnel are wanting to be healthy. The risks entailed in this career demand it. The recommendations are attainable and should be pursued by the command staff.

**References:**

1. ForceScience.org, “Call to Action in the battle of the Bulge,” July 2015, Chuck Remsberg
2. PoliceOne.com, “Tackling the Obesity Epidemic in Law Enforcement,” April 2017, Mathew Loux
3. Officer.com, “Heart Disease and Law Enforcement,” March 2018, Pamela Kulbarsh
4. National Law Enforcement Officer Memorial Fund
5. FEMA Annual Report “Firefighter Fatalities in the U.S. 2017, 2016, 2015”
6. Careercast.com, “The Most Stressful Jobs of 2018”

## Appendix 1

### Survey responses to questions 5 and 6

5. Should the department have physical fitness standards that must be met, by all certified officers? Why?

- Standards ensure officers are fit for duty and able to complete their assigned tasks
- Fitness will keep self and co-workers safe
- Otherwise, liability to self and others
- Heart disease and other preventable diseases are a major contributor to premature death, medical leave, and medical retirement.
  - Physical fitness can be a very relevant factor in surviving/prevaling over a suspect.
  - Physical fitness could also be a decisive factor in whether a fallen officer or victim can be successfully rescued.
- Helps deal with stress
- As a department we will be more physically able to do our jobs with less chance of getting injured
- Physical fitness standards ensure that employees are prepared to face a variety of hazards that are frequently encountered by employees.
  - Further, physical fitness of employees can greatly reduce the chance for injury and disease, reducing lost work-time and controlling cost.
  - Physical fitness standards also ensure that the agency remains a professional looking organization with physically fit employees.
- I believe a subpar level of fitness can lead to the death of self or fellow officer(s)
- Task related fitness standards will show if employees are able to perform duties required
- Physical fitness is important to this job because not only do our lives depend on our abilities but also those we work with and community
- Physical fitness is good for your health and will better your performance while on duty
- Physical requirements and expectations of the job and so physical exertion is not seen as a risk while performing duties. It increases overall health and performance of the employee minimization claims, time off and injury
- Streets are becoming more violent. There seems to be more bush bonds and running than before. In general public seem to be in better shape than some department members
- I think we should have a program because we owe it to ourselves and citizens we serve to be in the best shape to help them in their time of need.
- It keeps everyone accountable for themselves. It also is nice to know your back up will be able to fight when they arrive
- It reduces the number of injuries and it benefits the medical standard
- Increase overall health and safety. This will also reduce cost for insurance payable events

- I believe incorporating a physical fitness standard would benefit the department due to a more physically fit person isn't in and out of the doctor's office. The person's immune system is stronger, less chance of physical injuries. The employee is out of work less, city insurance rates could possibly decrease, less workman's comp claims and possibly less illnesses being passed on from person to person.
- Physical fitness has shown people who are physically fit live longer and perform better on their job tasks. They also have more confidence
- I believe that the department should have physical fitness standards because of the life-saving nature of the job. Officers should be able to depend on their co-workers to be fit enough to endure and extended incident, such as an active shooter, or to respond quickly to save the life of another.

6. If the department should not have physical fitness standards that must be met by all, why?

- Depending on the shift and work schedule, sometimes (more than not) I have had a difficult time to work out (e.g. family obligations)
- Physical limitations that may not inhibit daily duties but would be difficult for a fitness test
- I do not think it is fair for personnel to be held to a standard that effects their employment without being provided the training, time, and equipment to meet the standard. Also, in my experience, such standards are rarely enforced fairly and equally. I would support an eligibility standard for promotions or special assignments, but not one that could result in the loss of employment. I am not including applicants in my response...they are different (practically and legally).